

**** CONFIDENTIAL ****
 ****PRE-DECISIONAL DOCUMENT ****
 **** SUMMARY SCORESHEET ****
 **** FOR COMPUTING PROJECTED HRS SCORE ****

**** Do Not Cite or Quote ****

Site Name: Lake Conestee

Region: Region 4

Scenario Name: Based on SI data

City, County, State: , South Carolina

Evaluator: Jason Williams

EPA ID#:

Date: 08/04/2021

Lat/Long: ", "

Congressional District:

This Scoresheet is for: SI

Scenario Name: Based on SI data

Description: Cadmium was used as the contaminant for the source (contaminated sediment). 0.1 to 1 mile of wetlands delineated based on LCP008, LCP010, LCP013. Wetlands determined using USF&W National Wetlands INventory maps.

	S pathway	S ² pathway
Ground Water Migration Pathway Score (S _{gw})	0.0	0.0
Surface Water Migration Pathway Score (S _{sw})	60.0	3600.0
Soil Exposure and Subsurface Intrusion Pathway Score (S _{sessi})	0.0	0.0
Air Migration Score (S _a)	0.0	0.0
$S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2$		3600.0
$(S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2)/4$		900.0
$\sqrt{(S_{gw}^2 + S_{sw}^2 + S_{sessi}^2 + S_a^2)/4}$		30.0

Pathways not assigned a score (explain):

TABLE 4-1 --SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Watershed Evaluated: Lake Conestee		
Drinking Water Threat		
Likelihood of Release:		
1. Observed Release	550	550.0
2. Potential to Release by Overland Flow:		
2a. Containment	10	0.0
2b. Runoff	10	0.0
2c. Distance to Surface Water	5	3.0
2d. Potential to Release by Overland Flow [(lines 2a(2b + 2c)]	35	0.0
3.Potential to Release by Flood:		
3a. Containment (Flood)	10	0.0
3b. Flood Frequency	50	0.0
3c. Potential to Release by Flood (lines 3a x 3b)	500	0.0
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500	0.0
5. Likelihood of Release (higher of lines 1 and 4)	550	550.0
Waste Characteristics:		
6. Toxicity/Persistence	(a)	10000.0
7. Hazardous Waste Quantity	(a)	1000000.0
8. Waste Characteristics	100	100.0
Targets:		
9. Nearest Intake	50	0.0
10. Population:		
10a. Level I Concentrations	(b)	0.0
10b. Level II Concentrations	(b)	0.0
10c. Potential Contamination	(b)	0.0
10d. Population (lines 10a + 10b + 10c)	(b)	0.0
11. Resources	5	0.0
12. Targets (lines 9 + 10d + 11)	(b)	0.0
Drinking Water Threat Score:		
13. Drinking Water Threat Score [(lines 5x8x12)/82,500, subject to a max of 100]	100	0.0
Human Food Chain Threat		
Likelihood of Release:		
14. Likelihood of Release (same value as line 5)	550	550.0
Waste Characteristics:		
15. Toxicity/Persistence/Bioaccumulation	(a)	5.0E8
16. Hazardous Waste Quantity	(a)	1000000.0
17. Waste Characteristics	1000	1000.0
Targets:		
18. Food Chain Individual	50	0.0
19. Population		
19a. Level I Concentration	(b)	0.0
19b. Level II Concentration	(b)	0.0
19c. Potential Human Food Chain Contamination	(b)	0.0

19d. Population (lines 19a + 19b + 19c)	(b)	0.0	
20. Targets (lines 18 + 19d)	(b)		0.0
Human Food Chain Threat Score:			
21. Human Food Chain Threat Score [(lines 14x17x20)/82,500, subject to max of 100]	100		0.0
Environmental Threat			
Likelihood of Release:			
22. Likelihood of Release (same value as line 5)	550		550.0
Waste Characteristics:			
23. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	5.0E8	
24. Hazardous Waste Quantity	(a)	1000000.0	
25. Waste Characteristics	1000		1000.0
Targets:			
26. Sensitive Environments			
26a. Level I Concentrations	(b)	0.0	
26b. Level II Concentrations	(b)	25.0	
26c. Potential Contamination	(b)	0.0	
26d. Sensitive Environments (lines 26a + 26b + 26c)	(b)	25.0	
27. Targets (value from line 26d)	(b)		25.0
Environmental Threat Score:			
28. Environmental Threat Score [(lines 22x25x27)/82,500 subject to a max of 60]	60		60.0
Surface Water Overland/Flood Migration Component Score for a Watershed			
29. Watershed Score ^C (lines 13+21+28, subject to a max of 100)	100		60.00
Surface Water Overland/Flood Migration Component Score			
30. Component Score (S _{SW}) ^C (highest score from line 29 for all watersheds evaluated)	100		60.00

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c Do not round to nearest integer

TABLE 4-25 --GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Watershed Evaluated: Lake Conestee		
Drinking Water Threat		
Likelihood of Release to an Aquifer:		
1. Observed Release	550	0.0
2. Potential to Release:		
2a. Containment	10	0.0
2b. Net Precipitation	10	0.0
2c. Depth to Aquifer	5	0.0
2d. Travel Time	35	0.0
2e. Potential to Release [(lines 2a(2b + 2c + 2d)]	500	0.0
3. Likelihood of Release (higher of lines 1 and 2e)	550	0.0
Waste Characteristics:		
4. Toxicity/Mobility	(a)	0.0
5. Hazardous Waste Quantity	(a)	0.0
6. Waste Characteristics	100	0.0
Targets:		
7. Nearest Well	(b)	0.0
8. Population:		
8a. Level I Concentrations	(b)	0.0
8b. Level II Concentrations	(b)	0.0
8c. Potential Contamination	(b)	0.0
8d. Population (lines 8a + 8b + 8c)	(b)	0.0
9. Resources	5	0.0
10. Targets (lines 7 + 8d + 9)	(b)	0.0
Drinking Water Threat Score:		
11. Drinking Water Threat Score [(lines 3 x 6 x 10)/82,500, subject to max of 100]	100	0.0
Human Food Chain Threat		
Likelihood of Release:		
12. Likelihood of Release (same value as line 3)	550	0.0
Waste Characteristics:		
13. Toxicity/Mobility/Persistence/Bioaccumulation	(a)	0.0
14. Hazardous Waste Quantity	(a)	0.0
15. Waste Characteristics	1000	0.0
Targets:		
16. Food Chain Individual	50	0.0
17. Population		
17a. Level I Concentration	(b)	0.0
17b. Level II Concentration	(b)	0.0
17c. Potential Human Food Chain Contamination	(b)	0.0
17d. Population (lines 17a + 17b + 17c)	(b)	0.0
18. Targets (lines 16 + 17d)	(b)	0.0

Human Food Chain Threat Score:

19. Human Food Chain Threat Score [(lines 12x15x18)/82,500, subject to max of 100]	100	0.0
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Environmental Threat**Likelihood of Release:**

20. Likelihood of Release (same value as line 3)	550	0.0
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Waste Characteristics:

21. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	0.0
22. Hazardous Waste Quantity	(a)	0.0
23. Waste Characteristics	1000	0.0

Targets:

24. Sensitive Environments		
24a. Level I Concentrations	(b)	0.0
24b. Level II Concentrations	(b)	0.0
24c. Potential Contamination	(b)	0.0
24d. Sensitive Environments (lines 24a + 24b + 24c)	(b)	0.0
25. Targets (value from line 24d)	(b)	0.0

Environmental Threat Score:

26. Environmental Threat Score [(lines 20x23x25)/82,500 subject to a max of 60]	60	0.0
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Ground Water to Surface Water Migration Component Score for a Watershed

27. Watershed Score ^C (lines 11 + 19 + 28, subject to a max of 100)	100	0.0
28. Component Score (S _{gs}) ^C (highest score from line 27 for all watersheds evaluated, subject to a max of 100)	100	0.0

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c Do not round to nearest integer

TABLE 5-1 --SOIL EXPOSURE COMPONENT SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned	
Likelihood of Exposure:			
1. Likelihood of Exposure	550		
Waste Characteristics:			
2. Toxicity	(a)	0.0	
3. Hazardous Waste Quantity	(a)		
4. Waste Characteristics	100		0.0
Targets:			
5. Resident Individual	50		
6. Resident Population:			
6a. Level I Concentrations	(b)	0	
6b. Level II Concentrations	(b)	0	
6c. Population (lines 6a + 6b)	(b)	0	
7. Workers	15	0.0	
8. Resources	5		
9. Terrestrial Sensitive Environments	(c)		
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)		0.0
Resident Population Threat Score			
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)		0.0
Nearby Population Threat			
Likelihood of Exposure:			
12. Attractiveness/Accessibility	100	0.0	
13. Area of Contamination	100	5.0	
14. Likelihood of Exposure	500		0.0
Waste Characteristics:			
15. Toxicity	(a)	0.0	
16. Hazardous Waste Quantity	(a)	0.0	
17. Waste Characteristics	100		0.0
Targets:			
18. Nearby Individual	1	0.0	
19. Population Within 1 Mile	(b)	0	
20. Targets (lines 18 + 19)	(b)		0
Nearby Population Threat Score			
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)		0.0
Soil Exposure Component Score:			
22. Pathway Score ^d (S _{se}), [lines (11+21)/82,500, subject to max of 100]	100		

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60

^d Do not round to nearest integer

TABLE 5-11 --SUBSURFACE INTRUSION COMPONENT SCORESHEET

Factor Categories and Factors	Maximum Value	Value Assigned
Likelihood of Exposure:		
1. Observed Exposure	550	0.0
2. Potential for Exposure		
2a. Structure Containment	10	1.0
2b. Depth to contamination	10	0.0
2c. Vertical Migration	15	1.0
2d. Vapor Migration Potential	25	0.0
3. Potential for Exposure (lines 2a * (2b+2c+2d), subject to a maximum of 500)	500	1.0
4. Likelihood of Exposure (higher of lines 1 or 3)	550	1.0
Waste Characteristics:		
5. Toxicity/Degradation	(a)	
6. Hazardous Waste Quantity	(a)	
7. Waste Characteristics (subject to a maximum of 100)	100	
Targets:		
8. Exposed Individual	50	
9. Population:		
9a. Level I Concentrations	(b)	0
9b. Level II Concentrations	(b)	0
9c. Population within an Area of Subsurface Contamination	(b)	0.0
9d. Total Population (lines 9a + 9b + 9c)	(b)	0
10. Resources	5	0.0
11. Targets (lines 8 + 9d + 10)	(b)	0
Subsurface Intrusion Component Score:		
12. Subsurface Intrusion Component (lines 4 x 7 x 11)/82,500 ^C (subject to a maximum of 100)	100	
Soil Exposure and Subsurface Intrusion Pathway Score:		
13. Soil Exposure Component + Subsurface Intrusion Component (subject to a maximum of 100)	100	
^a Maximum value applies to waste characteristics category		
^b Maximum value not applicable		
^c No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60		

TABLE 6-1 --AIR MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Likelihood of Release:		
1. Observed Release	550	
2. Potential to Release:		
2a. Gas Potential to Release	500	
2b. Particulate Potential to Release	500	
2c. Potential to Release (higher of lines 2a and 2b)	500	
3. Likelihood of Release (higher of lines 1 and 2c)	550	
Waste Characteristics:		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	
Targets:		
7. Nearest Individual	50	
8. Population:		
8a. Level I Concentrations	(b)	
8b. Level II Concentrations	(b)	
8c. Potential Contamination	(c)	
8d. Population (lines 8a + 8b + 8c)	(b)	
9. Resources	5	
10. Sensitive Environments:		
10a. Actual Contamination	(c)	
10b. Potential Contamination	(c)	
10c. Sensitive Environments (lines 10a + 10b)	(c)	
11. Targets (lines 7 + 8d + 9 + 10c)	(b)	
Air Migration Pathway Score:		
12. Pathway Score (S_a) $[(\text{lines } 3 \times 6 \times 11)/82,500]^d$	100	

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c No specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.

^d Do not round to nearest integer